(FILE 'HOME' ENTERED AT 10:57:13 ON 13 NOV 2006)

FILE 'HCAPLUS' ENTERED AT 10:57:29 ON 13 NOV 2006 E US20040058134/PN

1 SEA ABB=ON PLU=ON US2004058134/PN L1

FILE 'WPIX' ENTERED AT 10:58:09 ON 13 NOV 2006 E US20040058134/PN

1 SEA ABB=ON PLU=ON US20040058134/PN L2

FILE 'HCAPLUS' ENTERED AT 10:59:29 ON 13 NOV 2006

- 13551 SEA ABB=ON PLU=ON BODY (3A) (PART# OR FOOT OR FEET OR L3 HAND# OR ARM# OR LEG# OR PERSON)
- 20356 SEA ABB=ON PLU=ON (DIFFERENT OR VARY? OR PEAK) (2A) L4 PRESSURE#
- 17871 SEA ABB=ON PLU=ON PRESSURE (3A) (PATTERN# OR DESIGN#  $L_5$ OR IMAGE# OR FORM# OR SAMPLE#)
- 497 SEA ABB=ON PLU=ON (SHOE# OR PANT# OR GLOVE# OR 1.6 CLOTHING OR CLOTHES OR PANT# OR SHIRT#) (S) (MARK? OR IDENTIF? OR LABEL? OR TAG?)
- L7 38463 SEA ABB=ON PLU=ON (SHOE# OR PANT# OR GLOVE# OR CLOTHING OR CLOTHES OR PANT# OR SHIRT#)
- 4 SEA ABB=ON PLU=ON L3 AND L4  $^{18}$
- 21 SEA ABB=ON PLU=ON L3 AND L5 L9
- 1 SEA ABB=ON PLU=ON L3 AND L5 AND L6 L10
- 1 SEA ABB=ON PLU=ON L3 AND L5 AND L7
- 2 SEA ABB=ON PLU=ON L9 AND PRESSURE (2A) DISTRIBUT?
- T.13 6 SEA ABB=ON PLU=ON L8 OR L10 OR L11 OR L12
- 5 SEA ABB=ON PLU=ON L13 AND (1840-2002)/PRY,PY,AY L14

FILE 'WPIX' ENTERED AT 11:46:56 ON 13 NOV 2006

- 94955 SEA ABB=ON PLU=ON BODY (3A) (PART# OR FOOT OR FEET OR L15 HAND# OR ARM# OR LEG# OR PERSON)
- L16 12722 SEA ABB=ON PLU=ON (DIFFERENT OR VARY? OR PEAK) (2A) PRESSURE#
- 25294 SEA ABB=ON PLU=ON PRESSURE (3A) (PATTERN# OR DESIGN# T.17 OR IMAGE# OR FORM# OR SAMPLE#)
- L18 2270 SEA ABB=ON PLU=ON (SHOE# OR PANT# OR GLOVE# OR CLOTHING OR CLOTHES OR PANT# OR SHIRT#) (S) (MARK? OR IDENTIF? OR LABEL? OR TAG?)
- 141350 SEA ABB=ON PLU=ON (SHOE# OR PANT# OR GLOVE# OR L19 CLOTHING OR CLOTHES OR PANT# OR SHIRT#)
- L20
- 111 SEA ABB=ON PLU=ON L15 AND L16
  6 SEA ABB=ON PLU=ON L15 AND L16 AND L17
  178 SEA ABB=ON PLU=ON L15 AND L17
  1 SEA ABB=ON PLU=ON L15 AND L17 AND L18 L21
- L22
- L23
- 9 SEA ABB=ON PLU=ON L15 AND L17 AND L19 L24
- 13 SEA ABB=ON PLU=ON L21 OR L23 OR L24 L25
- 7 SEA ABB=ON PLU=ON L15 AND L17 AND PRESSURE (2A) L26 DISTRIBUT?
- L27 15 SEA ABB=ON PLU=ON L21 OR L23 OR L24 OR L26
- 2 SEA ABB=ON PLU=ON L27 AND A41D?/IC L28
- 2 SEA ABB=ON PLU=ON L27 AND A41H?/IC L29
- 1 SEA ABB=ON PLU=ON L27 AND A41B?/IC L30
- L31 1 SEA ABB=ON PLU=ON L27 AND B32B?/IC
- L32 8 SEA ABB=ON PLU=ON L26 OR L28 OR L29 OR L30 OR L31

FILE 'JAPIO' ENTERED AT 12:14:57 ON 13 NOV 2006

- 34 SEA ABB=ON PLU=ON L15 AND L16 L33
- O SEA ABB=ON PLU=ON L15 AND L16 AND L17 L34
- 137 SEA ABB=ON PLU=ON L15 AND L17 L35

L38

- O SEA ABB=ON PLU=ON L15 AND L17 AND L18 L36
- O SEA ABB=ON PLU=ON L15 AND L17 AND L19 L37 O SEA ABB=ON PLU=ON L15 AND L17 AND L19 AND PRESSURE

### (2A) DISTRIBUT? L39 O SEA ABB=ON PLU=ON L34 OR L36 OR L37 OR L38 FILE 'JICST-EPLUS' ENTERED AT 12:18:15 ON 13 NOV 2006 10 SEA ABB=ON PLU=ON L15 AND L16 L40 O SEA ABB=ON PLU=ON L15 AND L16 AND L17 L41 L42 8 SEA ABB=ON PLU=ON L15 AND L17 0 SEA ABB=ON PLU=ON L15 AND L17 AND L18 L43 2 SEA ABB=ON PLU=ON L15 AND L17 AND L19 L44 L45 2 SEA ABB=ON PLU=ON L15 AND L17 AND PRESSURE (2A) DISTRIBUT? 2 SEA ABB=ON PLU=ON L15 AND L16 AND PRESSURE (2A) L46 DISTRIBUT? L47 5 SEA ABB=ON PLU=ON L44 OR L45 OR L46 FILE 'COMPENDEX' ENTERED AT 12:25:06 ON 13 NOV 2006 8 SEA ABB=ON PLU=ON L15 AND L16 L49 O SEA ABB=ON PLU=ON L15 AND L16 AND L17 L50 8 SEA ABB=ON PLU=ON L15 AND L17 O SEA ABB=ON PLU=ON L15 AND L17 AND L18 L51 L52 O SEA ABB=ON PLU=ON L15 AND L17 AND L19 2 SEA ABB=ON PLU=ON L15 AND L16 AND PRESSURE (2A) L53 DISTRIBUT? L54 3 SEA ABB=ON PLU=ON L15 AND L17 AND PRESSURE (2A)

# => file wpix FILE 'WPIX' ENTERED AT 12:33:24 ON 13 NOV 2006 COPYRIGHT (C) 2006 THE THOMSON CORPORATION

DISTRIBUT?

L55

# >>> YOU ARE IN THE NEW AND ENHANCED DERWENT WORLD PATENTS INDEX <<<

5 SEA ABB=ON PLU=ON L53 OR L54

=> d 132	que st	at .
L15	94955	SEA FILE=WPIX ABB=ON PLU=ON BODY (3A) (PART# OR FOOT
		OR FEET OR HAND# OR ARM# OR LEG# OR PERSON)
L16	12722	SEA FILE=WPIX ABB=ON PLU=ON (DIFFERENT OR VARY? OR
		PEAK) (2A) PRESSURE#
L17	25294	SEA FILE=WPIX ABB=ON PLU=ON PRESSURE (3A) (PATTERN# OR
		DESIGN# OR IMAGE# OR FORM# OR SAMPLE#)
L18	2270	SEA FILE=WPIX ABB=ON PLU=ON (SHOE# OR PANT# OR GLOVE#
		OR CLOTHING OR CLOTHES OR PANT# OR SHIRT#) (S) (MARK? OR
		IDENTIF? OR LABEL? OR TAG?)
L19	141350	SEA FILE=WPIX ABB=ON PLU=ON (SHOE# OR PANT# OR GLOVE#
		OR CLOTHING OR CLOTHES OR PANT# OR SHIRT#)
L21	6	SEA FILE=WPIX ABB=ON PLU=ON L15 AND L16 AND L17
L23	1	SEA FILE=WPIX ABB=ON PLU=ON L15 AND L17 AND L18
L24	.9	SEA FILE=WPIX ABB=ON PLU=ON L15 AND L17 AND L19
L26	7	SEA FILE=WPIX ABB=ON PLU=ON L15 AND L17 AND PRESSURE
		(2A) DISTRIBUT?
L27	15	SEA FILE=WPIX ABB=ON PLU=ON L21 OR L23 OR L24 OR L26
L28	2	SEA FILE=WPIX ABB=ON PLU=ON L27 AND A41D?/IC
L29	2	SEA FILE=WPIX ABB=ON PLU=ON L27 AND A41H?/IC
L30	1	SEA FILE=WPIX ABB=ON PLU=ON L27 AND A41B?/IC
L31	1	SEA FILE=WPIX ABB=ON PLU=ON L27 AND B32B?/IC
L32	8	SEA FILE=WPIX ABB=ON PLU=ON L26 OR L28 OR L29 OR L30
		OR L31

=> file wpix FILE 'WPIX' ENTERED AT 12:33:43 ON 13 NOV 2006 COPYRIGHT (C) 2006 THE THOMSON CORPORATION

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L32 ANSWER 1 OF 8 WPIX COPYRIGHT 2006
                                              THE THOMSON CORP on STN
     2004-101579 [11]
                       WPIX Full-text
DNN N2004-081100 [11]
     Identification device used for identifying
ΤI
 clothing comprises an image of a pressure
     -distribution pattern obtained by a
     two-dimensional tracing of the pressure
     distribution between a body part of a
     person and a fixed body
DC
     P21; P22; P73
ΙN
     SEITZ P
     (SEIT-I) SEITZ P
PA
CYC 33
                    A2 20040121 (200411)* DE 9[5]
                                                           A41D0027-08
PΤ
     EP 1382267
     CA 2434824
                    A1 20040116 (200413) EN
                                                           A61B0005-117
     DE 10232197
                    A1 20040212 (200413) DE
                                                           A41H0001-00
     <u>US 20040058134</u> A1 20040325 (200422) EN
                                                           B32B0003-00
     DE 10232197
                    B4 20050303 (200516) DE
                                                           A41H0001-06
ADT EP 1382267 A2 EP 2003-16036 20030715; DE 10232197 A1 DE
     2002-10232197 20020716; DE 10232197 B4 DE 2002-10232197 20020716; CA
     2434824 A1 CA 2003-2434824 20030709; US 20040058134 A1 US
     2003-620549 20030716
PRAI DE 2002-10232197 20020716
     ICM A41D0027-08; A41H0001-00;
         A41H0001-06; A61B0005-117; B32B0003-00
     ICS A41H0003-04; A43D0008-16; D06H0001-02; D06H0001-04
AΒ
     EP 1382267 A2
                    UPAB: 20050906
     NOVELTY - Identification device comprises an image of a pressure-distribution pattern
     obtained by at least one at least two-dimensional tracing of the pressure distribution
     between a body part of a person and a fixed body.
     DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a process for
     producing an identification device. Preferred Features: Different pressures are
     represented by flat elements of different colors and/or different markings.
     USE - Used for identifying clothing, especially a shoe or insole, by obtaining the
     pressure-distribution pattern under a foot during walking (claimed).
     ADVANTAGE - Easy recognizability and simultaneously high individualization are
     quaranteed.
     DESCRIPTION OF DRAWINGS - The drawing shows an identification device with a foot
     impression.
FS
     GMP I
L32 ANSWER 2 OF 8 WPIX COPYRIGHT 2006
                                              THE THOMSON CORP on STN
     2003-632360 [60]
                       WPIX Full-text
DNN N2003-503764 [60]
     Body protection method for e.g. elderly person, involves operating
     airbag apparatus to expand according change of distribution state
     detected by pressure sensors, to protect body of walking
     person from impact at the time of fall
DC
     P35
     HOSAKA; IMAI S; SUZUKI N; WATANABE H; YAMAZAKI N
IN
PA
     (HOND-C) HONDA MOTOR CO LTD
CYC 1
PΙ
     JP 2003236002 A 20030826 (200360)* JA 11[7]
                                                           A62B0035-00
ADT JP 2003236002 A JP 2002-43295 20020220
PRAI JP 2002-43295 20020220
     ICM A62B0035-00
IC
AΒ
     JP 2003236002 A
                       UPAB: 20050531
     NOVELTY - The method involves detecting the distribution of load at the back-of-the-
      foot of a walking person by pressure sensors (111L,112L) provided at a shoe sole. An
      airbag apparatus (4) is operated and expands according to the detection result of the
      sensors by the change of distribution state, to protect the body of the walking person
      from impact at the time of fall.
      DETAILED DESCRIPTION - An INDEPENDENT CLAIM is also included for a body protection
     USE - For e.g. elderly person.
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ADVANTAGE - Effectively protects body of person by reliably relieving impact of person at the time of fall. DESCRIPTION OF DRAWINGS - The figure shows the block diagram of the principal part of the airbag system. (Drawings includes non-English language) Airbag apparatus (4) Sole pressure pattern detecting part (31) Sustainable detection pattern storage part (32) Log detection pattern storage part (33) Pressure sensors (111L,112L) ANSWER 3 OF 8 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN 2003-140635 [13] WPIX Full-text DNC C2003-035834 [13] DNN N2003-111642 [13] Variable structure fabric for use in e.g., upholstery, technical clothing, deployable structures, comprises control module connected to pattern having deformable actuators through connecting tubes F03; T01; X27 LIRA C (ANGR-I) ANGRILLI F; (DEBE-I) DEBEI S; (LIRA-I) LIRA C CYC 98 WO 2002099172 A1 20021212 (200313)\* EN 25[14] D03D0003-00 A1 20021216 (200452) EN AU 2002309081 B 20050714 (200574) D04H0000-00 IT 1328658 ITWO 2002099172 A1 WO 2002-IB2006 20020605; IT 1328658 B IT 2001-B0359 20010605; AU 2002309081 A1 AU 2002-309081 20020605 AU 2002309081 Al Based on WO 2002099172 A PRAI IT 2001-B0359 20010605 ICM D03D0003-00; D04H0000-00 WO 2002099172 A1 UPAB: 20060202 NOVELTY - A variable structure fabric comprises a pattern (3) having deformable actuators. It comprises a control module (2) connected to the pattern through connecting tubes (4). USE - For use in upholstery, technical clothing, underwear or other clothing item, vehicle interior linings and deployable structures (claimed). ADVANTAGE - The use of deformable actuators which are interwoven or otherwise interconnected, or which are applied separately in particular positions within the fabric creates a system capable of conforming to the body (while supporting and giving shape to it) and, if necessary, moving the body or the part that is wrapped in or supported by the fabric. DESCRIPTION OF DRAWINGS - The figure shows a front view of the variable structure fabric of the invention. Control module (2) Pattern (3) Tubes (4) TECH MECHANICAL ENGINEERING - Preferred Components: The module comprises a processing unit, a first user interface connected to the processing unit to allow the user to control the processing unit, an accumulator of fluid under pressure, a distributor controlled by the processing unit and connected to the accumulator and to the tubes to regulate and distribute the fluid under pressure to the pattern. The deformable actuators comprise tubular elements consisting of two parts of different rigidity. They may comprise a thread made from an inextensible material. The deformable actuators comprise a series of chambers made in such a way as to be arranged in a predetermined fashion when the fluid inside is under a predetermined pressure and to change their arrangement and the shape of the pattern when the fluid pressure increases. The fabric comprises a pressure sensor mounted on its surface and electrically connected to the module to detect the pressure between the pattern and the user in contact with or close to the pattern and to generate a corresponding pressure signal. A displacement sensor is mounted on its surface and electrically connected to the module to detect the relative motion between the pattern and the user, or in a deployable structure, in contact with or close to the pattern and to generate a corresponding signal. The processing unit is a microprocessor. A

safety device is used to relieve fluid pressure in the event of

. An internal pressure sensor detects the pressure of the

excessive movement and/or pressure in the pattern

FS

DC

IN

PΑ

ΡI

fluid within the pattern. METALLURGY - Preferred Material: The deformable actuators are made of a shape memory alloy. FS CPI; EPI CPI: F02-A03 MC. EPI: T01-J08A; X27-D09 ANSWER 4 OF 8 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN 2002-337847 [37] WPIX Full-text AN 2003-017929; 2003-265067 CR DNC C2002-097140 [37] DNN N2002-265491 [37] Consolidation of metal powder to form object by providing flowable pressure transmission particles, heating the particles and locating them in bed, positioning body at the bed and pressurising the bed DC DILMORE M F; FLEMING M S; MEEKS H S IN PA (CERA-N) CERACON INC CYC 1 B1 20020312 (200237)\* EN 18[15] B22F0003-12 PΤ US 6355209 ADT US 6355209 B1 Provisional US 1999-165781P 19991116; US 6355209 B1 US 2000-551248 20000418 PRAI US 2000-551248 20000418 US 1999-165781P 19991116 TC. ICM B22F0003-12 US 6355209 B1 UPAB: 20050525 AB

NOVELTY - Body of initially powdered, sintered, fibrous, sponge or other form capable of compaction is consolidated by providing flowable pressure transmission particles having carbonaceous and ceramic composition(s), heating the particles and locating them in a bed, positioning the body at the bed to receive pressure transmission, and effecting pressurization of the bed.

DETAILED DESCRIPTION - Consolidation of a body of initially powdered, sintered, fibrous, sponge, or other form capable of compaction involves providing flowable pressure transmission particles having carbonaceous and ceramic composition(s), heating the particles to elevated temperature, locating the heated particles in a bed, positioning the body at the bed to receive pressure transmission, and effecting pressurization of the bed to cause pressure transmission via the particles to the body, and thus to compact and consolidate the body into desired shape, increasing its density. The body to be consolidated has varying metallic composition along a body dimension.

USE - Used for consolidating a body in any of initially powdered, sintered, fibrous, sponge, or other form capable of compaction.

ADVANTAGE - The process provides for the rapid and efficient heating and handling of granular media employed in the consolidation, as well as rapid and efficient heating and handling of preform powdered metal or metal bodies to be consolidated. It provides improved structural articles of manufacture having minimal distortion. It employs carbon and graphite particles, which form easily around corners and edges to **distribute** applied **pressure** uniformly to and over the body being compacted. The particles suffer very minimal fracture under compaction pressure. They are not abrasive so allowing reduced scoring and wear of the die. They are elastically deformable, i.e. resiliently compressible under pressure and at elevated temperature, and are stable and usable up to 4,000 degreesF. The granules tend to separate easily from the body surface when the body is removed from the bed following compaction. They do not agglomerate, i.e. cling to one another, as a result of the body compaction process. The particles are readily recycled. They become rapidly heated in response to passage of electrical current or microwaves through them. DESCRIPTION OF DRAWINGS - The figure is a flow diagram showing the process described above.

TECH METALLURGY - Preferred Properties: The varying metallic composition of the consolidated body is characterized by decreasing hardness and/or increasing toughness along the dimension. The varying metallic composition has a series of zones, and the metal of each zone has a composition, which differs from that of an adjacent zone(s). At least part of the body has cylinder form.

Preferred Materials: The metals in successive zones consist of tungsten, iron, nickel, cobalt, manganese, or titanium. The body consists of powders of metals including tungsten, nickel, iron, or

cobalt that have been initially combined and compressed into body form at pressure exceeding 20,000 lbs/in2 prior to the pressurization step. The powders at one zone of the body consist of tungsten particles coated with nickel, iron, cobalt, manganese or titanium. The wt.% of nickel, iron and cobalt is 16% of the overall wt. of the total powder. The particles are spheroidal and consist of graphite, and/or graphite and ceramic composite. Preferred Process: The process includes pre-heating the body above 900 degreesC, subsequent to the initial combining and compressing and prior to the pressurization. It also includes effecting the initial combining and compressing at ambient temperature. It may include providing an elastomer container, positioning the powders in the container, and effecting the initial compressing by compressing the container. It comprises evacuating gases from the container, prior to the initial compressing, and sealing the container after evacuating gases from it. The initial compressing is effected to compress the body to 60% of body theoretical density. The pressurization is effected to form the body into cylindrical shape or to reduce the body size while maintaining body cylindrical shape with taper at one end. CPI; GMPI

FS CPI: M22-H03A MC

L32 ANSWER 5 OF 8 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN

AN 1997-434188 [40] WPIX Full-text

1998-530573 CR

DNN N1997-361225 [40]

Integrated seat and back mechanisms for tilting chair - has back with rotation unit connected to it and support, and back attached to bottom to move it in predetermined path

DC P26

UNWALLA J IN

PA (UNWA-I) UNWALLA J

CYC

A 19970826 (199740)\* EN 12[7] A47C0001-032 US 5660439 PΙ

ADT US 5660439 A US 1995-563063 19951127

PRAI GB 1995-22 19950104

IC ICM A47C0001-032

US 5660439 A UPAB: 20060113 AB

The chair has a base, a seat, a back, a back support and a mechanism which interconnects the seat, back and back support, and imparts a predetermined synchronous movement to the seat and back, i.e. rearward tilting of the seat and simultaneous rearward tilting of the back. The chair back has rotation means for rotatably connecting the chair back to the back support. The rotation is about a rotation axis which passes through the upper body of a person when the person is sitting on the seat and resting against the front of the chair back. The bottom portion of the chair is preferably guided so that the bottom may move along an arc between a first position and a second position which is forward and lower than the first position. The mechanism also has a very large range of movement allowing the user a continuous angular variation from forward inclination to full reclined inclination. The mechanism also allows the rate at which the back inclines with respect to the seat in various segments of the inclination range to be different. The seat and back are contoured specifically to accommodate a larger population, with a higher level of comfort, i.e. to provide a pleasing pressure distribution pattern, that varies proportionately and continuously with the tilting motion of the chair, throughout the movement range provided by the mechanism. The seat, back and mechanism thus form an integral part of the chair, in as much as the contour has been worked out in connection with the movement as stated above and some parts of the mechanism may be embedded into the seat and back. ADVANTAGE - When all the above parameters act in concert they impart a very high

comfort level and uniformity of support in either the static or the dynamic conditions.

FS GMPI

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L32 ANSWER 6 OF 8 WPIX COPYRIGHT 2006
                                            THE THOMSON CORP on STN
    1995-014512 [03]
                       WPIX Full-text
AN
DNC C1995-006551 [03]
DNN N1995-011431 [03]
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Mfr. of disposable diaper with side wings at waist level - by

forming extensions of back-sheet and top sheet welded together with back-sheet made of higher melting point material than top-sheet DC: A96; D22; F07; P21; P32; P34 MA S; SUEKANE M IN (UNIC-N) UNI CHARM KK; (UNIC-N) UNI-CHARM CORP; (UNIC-N) UNI-CHARM PΑ KK CYC 14 AU 9463137 A 19941124 (199503)\* EN 22[6] A61F0013-15 PΙ GB 2278993 19941221 (199503) EN 13[6] A61F0013-15 Α JP 06327714 Α 19941129 (199507) JA 5[6] A61F0013-15 A61F0013-15 EP 635248 A1 19950125 (199508) EN9[6] CA 2123772 A 19941120 (199509) EN A61F0013-15 CN 1095581 A 19941130 (199547) A61F0013-00 zHUS 5507895 A 19960416 (199621) EN 7[6] A61F0013-15 AU 669065 B 19960523 (199628) EN A61F0013-15 GB 2278993 В 19970219 (199711) A61F0013-15 EN EP 635248 B1 19970806 (199736) EN 9[6] A61F0013-15 DE 69404779 E 19970911 (199742) DEA61F0013-15 T3 19980301 (199815) ES A61F0013-15 ES 2111278 A1 19980928 (199903) EN A61F0013-15 SG 52329 CA 2123772 C 19981124 (199906) EN A61F0013-15 B2 20010618 (200136) A61F0013-49 JP 3177341 JA KR 298378 B 20011024 (200236) KO A61F0013-15 CN 1089574 C 20020828 (200525) ZH A61F0013-45 AU 9463137 A AU 1994-63137 19940516; JP 06327714 A JP 1993-117346 19930519; JP 3177341 B2 JP 1993-117346 19930519; AU 669065 B AU 1994-63137 19940516; DE 69404779 E DE 1994-69404779 19940516; EP 635248 A1 EP 1994-870083 19940516; EP 635248 B1 EP 1994-870083 19940516; DE 69404779 E EP 1994-870083 19940516; ES 2111278 T3 EP 1994-870083 19940516; US 5507895 A US 1994-242976 19940516; CA 2123772 A CA 1994-2123772 19940517; CA 2123772 C CA 1994-2123772 19940517; CN 1095581 A CN 1994-105607 19940519; CN 1089574 C CN 1994-105607 19940519; GB 2278993 A GB 1994-10026 19940519; GB 2278993 B GB 1994-10026 19940519; KR 298378 B KR 1994-10872 19940519; SG 52329 A1 SG 1996-2889 19940519 FDT AU 669065 B Previous Publ AU 9463137 A; DE 69404779 E Based on EP 635248 A; ES 2111278 T3 Based on EP 635248 A; JP 3177341 B2 Previous Publ JP 06327714 A; KR 298378 B Previous Publ KR 94025549 A PRAI JP 1993-117346 19930519 ICM A61F0013-00; A61F0013-15; A61F0013-45; A61F0013-49 ICS A41B0013-04; A41H0043-04; A61F0013-496; A61F0013-514; A61F0013-54; A61F0005-44; A61L0015-42 AΒ AU 9463137 A UPAB: 20060109 A disposable diaper is assembled from a liquid-permeable top-sheet (2), a liquid-

A disposable diaper is assembled from a liquid-permeable top-sheet (2), a liquid-impermeable back-sheet (3) and a liquid-absorbent core (4). Wing-like portions (21) extend outwardly from laterally opposite side edges of the core at both the front and back portions of the diaper. These are welded together under heat and pressure to form laterally opposite side portions at the waist-levels of the front and rear of the diaper. A sheet (3A) is attached to one or both of the top-sheet and back-sheet in each wing to ensure that the back-sheet in this region has a higher melting point than the top-sheet. The top-sheets and back-sheets are welded together along each waist side of the diaper. PREFERRED - In the illustrated embodiment, a polypropylene sheet member (3A) is attached to the polyethylene back-sheet (3) in the wing area. The top-sheet (2A) in this region is merely a continuation of the top-sheet (2) which is prepared from melt-bond nonwoven fabric of polypropylene fibre. The sheets are attached together by hot melt adhesive (33).

ADVANTAGE - The different melting points of the top-sheet and back-sheet prevents the top-sheet, even if molten, from sticking to the heating/pressing mechanism. This prevents the formation of a rough surface adjacent the infant's skin which could cause irritation. ABDT AU9463137

A disposable diaper is assembled from a liquid-permeable top-sheet (2), a liquid-impermeable back-sheet (3) and a liquid-absorbent core (4). Wing-like portions (21) extend outwardly from laterally opposite side edges of the core at both the front and back portions of the diaper. These are welded together under heat and pressure to form laterally opposite side portions at the waist-levels of the front and rear of the diaper.

A sheet (3A) is attached to one or both of the top-sheet and back-sheet in each wing to ensure that the back-sheet in this region has a higher melting point than the top-sheet. The top-sheets and back-sheets are welded together along each waist side of the diaper. ADVANTAGE The different melting points of the top-sheet and back-sheet prevents the top-sheet, even if molten, from sticking to the heating/pressing mechanism. This prevents the formation of a rough surface adjacent the infant's skin which could cause irritation. **EMBODIMENT** In an alternative arrangement, the top-sheet (2) may be a nonwoven fabric containing at least 60% w/w PET fibre to which is bonded a wing region sheet of polyethylene. The back-sheet (3) is made of polyethylene to which is bonded a wing region back-sheet of polypropylene. (JS) CPI; GMPI CPI: All-C01A; Al2-V03A; D09-C03; F04-C01; F04-F01 THE THOMSON CORP on STN L32 ANSWER 7 OF 8 WPIX COPYRIGHT 2006 1988-353779 [49] WPIX Full-text Interlining mfr. with body contour matching - using electronic pressure distribution measurement and comparison of obtained values with ideal force distribution characteristic P31; P32; S05; X27 SEITZ P (SEIT-I) SEITZ P CYC 12 A 19881201 (198849)\* DE 25[5] WO 8809147 A 19890531 (198922) DE EP 317591 JP 01503333 W 19891109 (198951) JA US 5088503 A 19920218 (199210) EN A61B0005-103 A61B0005-103 B1 19950802 (199535) DE 14[5] EP 317591 G 19950907 (199541) DE A61B0005-103 DE 3854259 ADT WO 8809147 A WO 1988-EP444 19880519; DE 3854259 G DE 1988-3854259 19880519; EP 317591 A EP 1988-904523 19880519; EP 317591 B1 EP 1988-904523 19880519; DE 3854259 G EP 1988-904523 19880519; JP 01503333 W JP 1988-504453 19880519; EP 317591 B1 WO 1988-EP444 19880519; DE 3854259 G WO 1988-EP444 19880519; US 5088503 A US 1990-335207 19900116 FDT DE 3854259 G Based on EP 317591 A; EP 317591 B1 Based on WO 8809147 A; DE 3854259 G Based on WO 8809147 A PRAI DE 1987-3717126 19870521 ICM A61B0005-103 IC A61B0005-10; A61C0013-00; G01L0005-00 WO 1988009147 A UPAB: 20050429 The interlining mfr. is effected by bringing the corresp. part of the wearer's body into a defined position relative to an electronic measuring device (2) which is used to measure the forces acting in two or three dimensions. The obtained output signals corresponding to the distribution of the compressive forces are fed to a computer (3) for comparison with a stored set of theoretical values. The obtained difference values are used to control the mfr. of the interlining to allow a closer approximation to the ideal force distribution characteristic. The measuring device (2) may use a measuring base with an applied foil (10) together defining a fluid-filled space (13) with detection of fluid pressure at spaced points upon contact with the required body part. USE - For mfr. of shoe insole, seat insert or dentures etc. GMPI; EPI EPI: S05-D01C5; X27-A L32 ANSWER 8 OF 8 WPIX COPYRIGHT 2006 THE THOMSON CORP on STN 1987-001768 [01] WPIX Full-text

AN DNC C1987-000732 [21]

FS

AN TТ

DC

IN

PΑ

PΙ

AB

FS MC

DNN N1987-001307 [21] Clothing of inextensible fabric with shaped pressurised TΙ

pockets - to provide vertical pressure gradient to support aircrew against acceleration forces

DC F07; P21; Q25

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IN BEAUSSANT R
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PA (SEAI-C) INTERTECHNIQUE SA

CYC 1

PI FR 2581964 A 19861121 (198701)\* FR 18[8]

ADT FR 2581964 A FR 1985-7409 19850515

PRAI FR 1985-7409 19850515

IC IC A41D0013-02; B64D0010-00

AB FR 2581964 A UPAB: 20050424

Clothing for supporting aircrew members against the stresses of high speed manoeuvres is made from a single panel of an inextensible flexible fabric incorporating shaped pockets which can be pressurised so that the effective support on the wearers body increases approximately linearly from the upper to the lower extremities of body when the person is oriented in their normal working position, e.g. in a partially reclined pilot's seat. Pref. the pressure distribution by the suit tends to maintain the wearers limbs in their normal working attitude.

Pref. the suit provides more support for the lower back and waist than for the upper part of the body and opt. has a pulsed boost pressure to the upper part of the suit to assist respiration. Opt. a collar provides local support for the neck and helmet and extensions to a general salopette or overall form provide supporting pressures via linked socks or gloves. Pref. a pressure control system provides for different rates of suit compression and decompression.

USE - To provide supporting pressures of up to 700 mbar. Use of an inextensible fabric tensioned by adjacent pressurised pockets of varying area provides a simple method of **pressure distribution** to provide a pressure gradient relative to the attitude of the wearer using a common hydrostatic pressure within the pockets.

FS CPI; GMPI

MC CPI: F04-C03; F04-E02

## => file hcaplus

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=> d l14 que stat
          13551 SEA FILE=HCAPLUS ABB=ON PLU=ON BODY (3A) (PART# OR
L3
                FOOT OR FEET OR HAND# OR ARM# OR LEG# OR PERSON)
L4
          20356 SEA FILE=HCAPLUS ABB=ON PLU=ON (DIFFERENT OR VARY? OR
                PEAK) (2A) PRESSURE#
L5
          17871 SEA FILE=HCAPLUS ABB=ON PLU=ON PRESSURE (3A) (PATTERN#
                OR DESIGN# OR IMAGE# OR FORM# OR SAMPLE#)
            497 SEA FILE=HCAPLUS ABB=ON PLU=ON (SHOE# OR PANT# OR
1.6
                GLOVE# OR CLOTHING OR CLOTHES OR PANT# OR SHIRT#) (S)
                (MARK? OR IDENTIF? OR LABEL? OR TAG?)
L7
          38463 SEA FILE=HCAPLUS ABB=ON PLU=ON
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                GLOVE# OR CLOTHING OR CLOTHES OR PANT# OR SHIRT#)
              4 SEA FILE=HCAPLUS ABB=ON PLU=ON L3 AND L4
r_8
            21 SEA FILE=HCAPLUS ABB=ON PLU=ON L3 AND L5
L9
             1 SEA FILE=HCAPLUS ABB=ON PLU=ON L3 AND L5 AND L6
L10
              1 SEA FILE=HCAPLUS ABB=ON PLU=ON
                                                L3 AND L5 AND L7
L11
             2 SEA FILE=HCAPLUS ABB=ON PLU=ON
                                                L9 AND PRESSURE (2A)
L12
                DISTRIBUT?
              6 SEA FILE=HCAPLUS ABB=ON PLU=ON L8 OR L10 OR L11 OR L12
L13 ·
              5 SEA FILE=HCAPLUS ABB=ON PLU=ON L13 AND (1840-2002)/PRY,
L14
                PY, AY
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=> file japio

FILE 'JAPIO' ENTERED AT 12:34:58 ON 13 NOV 2006 COPYRIGHT (C) 2006 Japanese Patent Office (JPO) - JAPIO

=> d 139 que stat

L15 94955 SEA FILE=WPIX ABB=ON PLU=ON BODY (3A) (PART# OR FOOT

		OR FEET OR HAND# OR ARM# OR LEG# OR PERSON)
L16	12722	SEA FILE=WPIX ABB=ON PLU=ON (DIFFERENT OR VARY? OR
		PEAK) (2A) PRESSURE#
L17	25294	SEA FILE=WPIX ABB=ON PLU=ON PRESSURE (3A) (PATTERN# OR
		DESIGN# OR IMAGE# OR FORM# OR SAMPLE#)
L18	2270	SEA FILE=WPIX ABB=ON PLU=ON (SHOE# OR PANT# OR GLOVE#
		OR CLOTHING OR CLOTHES OR PANT# OR SHIRT#) (S) (MARK? OR
		IDENTIF? OR LABEL? OR TAG?)
L19	141350	SEA FILE=WPIX ABB=ON PLU=ON (SHOE# OR PANT# OR GLOVE#
		OR CLOTHING OR CLOTHES OR PANT# OR SHIRT#)
L34	0	SEA FILE=JAPIO ABB=ON PLU=ON L15 AND L16 AND L17
L36	0	SEA FILE=JAPIO ABB=ON PLU=ON L15 AND L17 AND L18
L37	. 0	SEA FILE=JAPIO ABB=ON PLU=ON L15 AND L17 AND L19
L37 L38	-	SEA FILE=JAPIO ABB=ON PLU=ON L15 AND L17 AND L19 SEA FILE=JAPIO ABB=ON PLU=ON L15 AND L17 AND L19 AND
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# => file jicst

FILE 'JICST-EPLUS' ENTERED AT 12:35:07 ON 13 NOV 2006 COPYRIGHT (C) 2006 Japan Science and Technology Agency (JST)

=> d 147	que sta	at
L15	94955	SEA FILE=WPIX ABB=ON PLU=ON BODY (3A) (PART# OR FOOT
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		PEAK) (2A) PRESSURE#
L17	25294	SEA FILE=WPIX ABB=ON PLU=ON PRESSURE (3A) (PATTERN# OR
		DESIGN# OR IMAGE# OR FORM# OR SAMPLE#)
L19	141350	SEA FILE=WPIX ABB=ON PLU=ON (SHOE# OR PANT# OR GLOVE#
		OR CLOTHING OR CLOTHES OR PANT# OR SHIRT#)
L44	2	SEA FILE=JICST-EPLUS ABB=ON PLU=ON L15 AND L17 AND L19
L45	2	SEA FILE=JICST-EPLUS ABB=ON PLU=ON L15 AND L17 AND
	•	PRESSURE (2A) DISTRIBUT?
L46	2	SEA FILE=JICST-EPLUS ABB=ON PLU=ON L15 AND L16 AND
		PRESSURE (2A) DISTRIBUT?
L47	5	SEA FILE=JICST-EPLUS ABB=ON PLU=ON L44 OR L45 OR L46

# => file compendex FILE 'COMPENDEX' ENTERED AT 12:35:17 ON 13 NOV 2006 Compendex Compilation and Indexing (C) 2006 Elsevier Engineering Inform ation Inc (EEI). All rights reserved. Compendex (R) is a registered Trade mark of Elsevier Engineering Information Inc.

### => d 155 que stat 94955 SEA FILE=WPIX ABB=ON PLU=ON BODY (3A) (PART# OR FOOT L15 OR FEET OR HAND# OR ARM# OR LEG# OR PERSON) L16 12722 SEA FILE=WPIX ABB=ON PLU=ON (DIFFERENT OR VARY? OR PEAK) (2A) PRESSURE# 25294 SEA FILE=WPIX ABB=ON PLU=ON PRESSURE (3A) (PATTERN# OR L17 DESIGN# OR IMAGE# OR FORM# OR SAMPLE#) 2 SEA FILE=COMPENDEX ABB=ON PLU=ON L15 AND L16 AND L53 PRESSURE (2A) DISTRIBUT? 3 SEA FILE=COMPENDEX ABB=ON PLU=ON L15 AND L17 AND L54 PRESSURE (2A) DISTRIBUT? L55 5 SEA FILE=COMPENDEX ABB=ON PLU=ON L53 OR L54

=> file hcaplus jicst compendex FILE 'HCAPLUS' ENTERED AT 12:35:39 ON 13 NOV 2006 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2006 AMERICAN CHEMICAL SOCIETY (ACS) FILE 'JICST-EPLUS' ENTERED AT 12:35:39 ON 13 NOV 2006 COPYRIGHT (C) 2006 Japan Science and Technology Agency (JST) FILE 'COMPENDEX' ENTERED AT 12:35:39 ON 13 NOV 2006 Compendex Compilation and Indexing (C) 2006 Elsevier Engineering Inform ation Inc (EEI). All rights reserved. Compendex (R) is a registered Trade mark of Elsevier Engineering Information Inc. => dup rem 114 147 155 PROCESSING COMPLETED FOR L14 PROCESSING COMPLETED FOR L47 PROCESSING COMPLETED FOR L55 15 DUP REM L14 L47 L55 (O DUPLICATES REMOVED) => d all 156 1-15 L56 ANSWER 1 OF 15 COMPENDEX COPYRIGHT 2006 EEI on STN 2006(4):5352 COMPENDEX Full-text Flow measurements around a long axisymmetric body with varying cross TI section. Soltani, M.R. (Sharif University of Technology, Tehran, Iran); AU Taeibi-Rahni, M.; Farahani, M.; Heidari, M.R. MT 43rd AIAA Aerospace Sciences Meeting and Exhibit. American Institute of Aeronautics and Astronautics, AIAA MO Reno, NV, United States MD 10 Jan 2005-13 Jan 2005 43rd AIAA Aerospace Sciences Meeting and Exhibit - Meeting Papers SO 2005.p 7221-7233, AIAA 2005-50 43rd AIAA Aerospace Sciences Meeting and Exhibit - Meeting Papers PΥ MN 66366 DT Conference Article TC Theoretical; Experimental LA Supersonic flow over tapered bodies of revolution is investigated using both AΒ experimental and numerical methods. The experimental study consisted of a series of wind tunnel tests on an ogive-cylinder body and included the surface static pressure and boundary layer profiles measurements, at various angles of attack. Further, the flow around the model was visualized using Schlieren technique. All tests were conducted in the trisonic wind tunnel of Qadr Research Center, Iran. Static surface pressure results show that the circumferential pressure at different nose sections vary significantly with angles of attack, in contrast to the circumferential pressure signatures along the cylindrical part of the body. Total pressure measurements in the boundary layer, vary significantly both radially and longitudinally (along the body length). To study the effects of cross section variations on the pressure distribution and boundary layer profiles, several belts with various leading edge angles were installed at different locations along the cylindrical portion of the model. These belts caused major variations on both the surface pressure distributions and boundary layer profiles (especially after the middle belt). In addition, using the multi-block grid the thin layer Navier-Stokes (TLNS) equations was solved around the above models. Patched method is used near the interfaces. The numerical scheme uses implicit Beam-Warming central differencing; while Baldwin-Lomax turbulence modeling was used to close the Reynolds averaged Navier-Stokes equation. Good agreement is achieved when the numerical results are compared with the corresponding experimental data. Copyright \$CPY 2005 by the American Institute of Aeronautics and Astronautics, Inc. All rights reserved. 15 Refs.

CC 631.1 Fluid Flow (General); 943:2 Mechanical Variables Measurements; 651.2 Wind Tunnels; 932.3 Plasma Physics; 921 Applied Mathematics; 723.5 Computer Applications

\*Flow measurement; Boundary layers; Turbulence; Mathematical models;
Computer simulation; Pressure distribution;
Supersonic flow; Wind tunnels

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Axisymmetric body; Static pressure; Trisonic winds; Surface pressure
L56 ANSWER 2 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN
     2004:112645 HCAPLUS Full-text
AN
     Entered STN: 12 Feb 2004
ED
    Marking mechanism and use the same
                                          [Machine Translation].
TI
    Seitz, Peter
ΤN
PΑ
    Germany
     Ger. Offen., 9 pp.
     CODEN: GWXXBX
DT
     Patent
LΑ
     German
     ICM A41H0001-00
IC
     ICS A41H0003-04; D06H0001-04
FAN.CNT 1
                                                                   DATE
     PATENT NO.
                              DATE
                                            APPLICATION NO.
     _____
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     DE 10232197
                                20040212
                                            DE 2002-10232197
PΤ
                         A1
                                                                   200207
                                                                   16
                         В4
                                20050303
     DE 10232197
     EP 1382267
                         A3
                                20040825
                                            EP 2003-16036
                                                                   200307
                                                                   15
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         R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC,
             PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU,
             SK
                                20040325
     US 2004058134
                          A1
                                            US 2003-620549
                                                                   200307
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PRAI DE 2002-10232197
                                20020716 <--
CLASS
                 CLASS PATENT FAMILY CLASSIFICATION CODES
 PATENT NO.
                ICM
 DE 10232197
                        A41H0001-00
                 ICS
                        A41H0003-04; D06H0001-04
                 IPCI
                        A41H0001-00 [ICM, 7]; A41H0003-04 [ICS, 7];
                        A41H0003-00 [ICS,7,C*]; D06H0001-04 [ICS,7];
                        D06H0001-00 [ICS,7,C*]
                        A61B0005-103 [I,C*]; A61B0005-103 [I,A];
                 IPCR
                        D06H0001-00 [I,C*]; D06H0001-00 [I,A]
                        A61B005/103P2; D06H001/00
                 ECLA
 EP 1382267
                 IPCI
                        A41D0027-08 [ICM,7]; A41D0027-00 [ICM,7,C*];
                        D06H0001-00 [ICS,7]; G07C0009-00 [ICS,7]
                 ECLA
                        A61B005/103P2; D06H001/00
                 IPCI
                        B32B0003-00 [ICM,7]
 US 2004058134
                 IPCR
                        A61B0005-103 [I,C*]; A61B0005-103 [I,A];
                        D06H0001-00 [I,C*]; D06H0001-00 [I,A]
                 NCL
                        428/195.100
                        A61B005/103P2; D06H001/00
      [Machine Translation of Descriptors]. There is \boldsymbol{marking} mechanisms, the one which can
AB
     be glued on or the one which can be sewn on e.g. describes, Monogramme or such a thing
     for individualizing marking of articles of clothing, shoes, shoe inserts or such a
      thing from a person at the body to basic objects, known. The recognition value of such
      marking mechanisms is at least small if they are easily legible and easily producible.
      It is suggested illustrating the marking mechanism of a pressure distribution sample or
      forming/train as such, which is won by an at least two-dimensional scanning of a
      pressure distribution between a part of the body of the person and an essentially firm
      body.
```

L56 ANSWER 3 OF 15 COMPENDEX COPYRIGHT 2006 EEI on STN AN 2005(24):294 COMPENDEX Full-text

- TI Active foot pressure control for diabetic patients.
- AU Nandikolla, Vidya K. (Measurement and Controls Engineering Research Center (MCERC) College of Engineering Idaho State University, Pocatello, ID 83209, United States); Schoen, Marco P.; Mahajan, Ajay
- MT 2004 ASME International Mechanical Engineering Congress and Exposition, IMECE.
- MO ASME, Dynamic Systems and Control Division
- ML Anaheim, CA, United States
- MD 13 Nov 2004-19 Nov 2004
- SO American Society of Mechanical Engineers, Dynamic Systems and Control Division (Publication) DSC v 73 n 1 PART A 2004.p 619-624 Proceedings of the ASME Dynamic Systems and Control Division 2004 CODEN: ASMDEV
- PY 2004
- MN 64902
- DT Conference Article
- TC Theoretical
- LA English
- Foot Ulcer in diabetic patients is a serious medical problem. A major contributor for AB the development of diabetic foot ulcers is a high, localized plantar foot pressure. It is believed that in diabetes the nerves in the extreme parts of the human body are damaged and cause deregulated blood flow, which may cause an insufficient blood supply. This can lead to a loss of feeling, change in shape of the feet, necrosis and ulcerations, and ultimately to partial or total amputation of the body part. The loss of feeling in the feet results in a loss of feedback to control the foot pressure distribution . It is proposed that high foot pressure concentration can be avoided by using an active, intelligent shoe insert, which is based on the mechanics of smart materials. This paper investigates the controls schemes necessary to accomplish an external foot pressure distribution scheme for preventing ulcerations or the progression of existing ulcers. A simple mathematical model of the shoe insert is developed. Foot pressure distributions for healthy subjects are used as a basis to control elevated foot pressures by changing the shape of the shoe insert. The optimal shape of the shoe insert with regard to the existing pressure distribution is computed. The optimal shape is implemented using different control schemes. The performance and the efficiency of the proposed control schemes are compared and analyzed. The main advantage of the proposed active shoe insert is its capability to sense the pressure peaks, change the pressure distribution, and provide stimuli for increased blood flow in the diabetic feet. Copyright \$CPY 2004 by ASME. 17 Refs.
- CC 731.3 Specific Variables Control; 461.2 Biological Materials; 461.7 Health Care; 461.6 Medicine; 731.1 Control Systems; 732.2 Control Instrumentation
- CT \*Pressure control; Computer simulation; Sensors; Pressure
  distribution; Fuzzy control; Mathematical models; Biological
  organs; Disease control; Medical problems; Feedback control
- ST Active foot pressure control; Diabetic patients; Pressure concentration; Dynamical model
- L56 ANSWER 4 OF 15 JICST-EPlus COPYRIGHT 2006 JST on STN
- AN 1040782538 JICST-EPlus Full-text
- TI A Multi-modal Display of Tactile and Haptic Sensations
- AU KATO KEITARO; FUJIWARA TAKEHIRO OOKA MASAHIRO

MITSUYA YASUNAGA

- CS Meidai In
  - Meidai Joho
  - Nagoya Univ., Sch. of Eng.
- Nihon Kikai Gakkai Nenji Taikai Koen Ronbunshu, (2004) vol. 2004, no. Vol.7, pp. 335-336. Journal Code: X0587B (Fig. 4, Ref. 2)
- CY Japan
- DT Conference; Short Communication
- LA Japanese
- STA New
- AB In order to investigate effects on presentation tactile-haptic reality, the authors are developing a multi-modal display. In the present paper, we described configuration of the display and planning of experiments for evaluation. The present display was constituted of a manipulator, a gripping force display and tactile display. The manipulator has three servo motors to generate reaction force calculated from contact

between a virtual object and the manipulator. The gripping force display had a micro AC servo-motor to generate virtual grasping force. The gripping force display was equipped with two tactile displays on each finger to present distributed pressure. In the design for the tactile display, we developed a transformer for rearrangement of an array of stimulus pins. In verification test, we will measure time consumption to complete pegin-hole tasks and deferential threshold obtained from perform psychophysical experiments. (author abst.)

IC04013A (007.52:681.52) CC

manipulator; robot finger; tactile sense; force sense; fusion(combination); remote control; grasping; servomotor; braille; actuator; finger(body region); rehabilitation; display device; human interface

robot; robot structure component; sense; control; holding; BToperation(processing); control equipment; equipment; letter; hand(body region); arm(forefoot); extremity; body region; interface

force display

L56 ANSWER 5 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN

2002:373981 HCAPLUS Full-text

Entered STN: 21 May 2002 ED

Molding machine of body foodstuffs. [Machine Translation]. ΤI

IN Hiruta, Tamotsu; Matsukawa,

[NAME NOT TRANSLATED], Japan PΑ

so Jpn. Kokai Tokkyo Koho, 7 pp.

CODEN: JKXXAF

DТ Patent

LA Japanese

ICM A23P0001-12 IC ICS A23L0001-325

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 2002142743	A2	20020521	JP 2000-341601	200011

200011 09

PRAI JP 2000-341601

20001109 <--

C

CLASS		
PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 2002142743	ICM	A23P0001-12
	ICS	A23L0001-325
	IPCI	A23P0001-12 [ICM,7]; A23P0001-10 [ICM,7,C*];
		A23L0001-325 [ICS,7]
	IPCR	A23L0001-325 [I,C*]; A23L0001-325 [I,A];

[Machine Translation of Descriptors]. Forming the body which designates fish meat and AΒ the chicken etc. such as sardine as subject abbreviation spherically possesses the concave section in the underside, " it stacks and offer the molding machine of the body foodstuffs which it tries to be able produce the body foodstuffs of " condition automatically. In the hopper it is connected 1 which installs the extrusion mechanism 2 which at a time fixed quantity pushes out the body in lower part and this hopper 1, distribution facilities it is done in the tubular form block 3 where the body which was pushed out fills up, and this form block it cuts off and the cutter pushing pressure distribution facilities it is done possibly from the lower part of 5 which separates the body which fills up inside form block 3 and form block, 3 it constitutes with from the pushing pressure type 6 which forms the concave section in the underside of the body which fills up inside form block 3.

A23P0001-10 [I,C\*]; A23P0001-12 [I,A]

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L56 ANSWER 6 OF 15 JICST-EPlus COPYRIGHT 2006 JST on STN

<sup>1020684691</sup> JICST-EPlus Full-text AN

A Case of Bilateral Fingers Cold Injury Due to Liqueified Petroleum ΤI Gas.

NAKAE HAJIME ΑU

CS Akita Univ., Sch. of Med. Nihon Shokugyo. Saigai Igakkai Kaishi (Japanese Journal of SO Occupational Medicine and Traumatology), (2002) vol. 50, no. 3, pp. 227-229. Journal Code: S0211A (Fig. 1, Tbl. 1, Ref. 7) ISSN: 1345-2592 CYJapan DT Journal; Short Communication LΑ Japanese STA New AΒ Liqueified petroleum gas (LPG), which is popularized fuel for business and household use, is stored and transported in liquid form under high-pressure. Skin exposure to LPG causes cold injury due to the quick evaporative heat loss. We reported a rare case of LPG cold injury. A 28-year-old man sustained bilateral fingers cold injury and cured without complications, because he carried the LPG cylinder with his cotton work gloves. It is neccessary and effective to defrost the lesion with hot water, soon after sustaining the injury. (author abst.) CC GD02030K; GB05000S (616-001-08; 613.6+614.8-027) CT human (primates); case report; adult (person); man; frostbite; liquefied petroleum gas; finger(body region); accident; occupational health; protector; protective clothing; melting; erythema; blister; antiphlogistic; ointment; wound healing; safety management; alicyclic hydrocarbon; bicyclic sesquiterpene reporting; action and behavior; growth stage; human(sociology); BT maleness; sex; injury(disease); damage and injury; disease; liquefied gas; liquid; combustible gas; gaseous fuel; fuel; hand(body region); arm(forefoot); extremity; body region; public health; hygiene; garment; textile product; product; phase transition; exanthema; skin disease; symptom; drug; semi-solid preparation; pharmaceutical preparation; healing; metabasis; management; alicyclic compound; hydrocarbon; sesquiterpene; terpenoid ST occupational safety L56 ANSWER 7 OF 15 COMPENDEX COPYRIGHT 2006 EEI on STN 2000(38):4903 COMPENDEX Full-text AN ΤI Infant behavior recognition system based on pressure distribution image. AU Harada, Tatsuya (Univ of Tokyo, Tokyo, Jpn); Saito, Akihiko; Sato, Tomomasa; Mori, Taketoshi ICRA 2000: IEEE International Conference on Robotics and Automation. MT MO IEEE Robotics and Automation Society San Francisco, CA, USA 24 Apr 1900-28 Apr 1900 MD Proceedings - IEEE International Conference on Robotics and SO Automation v 4 2000.IEEE, Piscataway, NJ, USA.p 4082-4088 ISSN: 1050-4729 CODEN: PIIAET 2000 PΥ MN 57053 DTConference Article TC General Review LΑ English In this paper, we developed a novel infant behavior recognition system based on a AB pressure distribution image. The one novel function is that the system can recognize infant's status (quiet, moving and crying), posture, body parts' positions and movement unrestraintly. The other novel function is that the system can recognize the behavior coping with the infant's rapid growth and unique physique. The algorithm of infant behavior recognition system is summarized as follows. 1) At first, the system measures the pressure distribution image with 384 pressure sensors distributed bed. 2) We propose 'Activity score' The activity score is calculated by using the measured pressure distribution image and indicates kinetic energy of infant's activity. Based on the activity score, the system decides the infant's status. 3) If the infant is quiet, the system estimates the infant's physique. 4) Based on the estimated physique, the system recognizes the infant's posture and body part's movement. An experimental results reveal that the system successfully recognizes infants' status (quiet, moving and crying), posture, body parts position and these movement. (Author abstract) 8 Refs.

723.5 Computer Applications; 723.2 Data Processing; 741.3 Optical

CC

Devices and Systems; 723.1 Computer Programming; 461.4 Human Engineering

- CT \*Pattern recognition systems; Algorithms; Computer simulation; Image
   sensors; Human engineering; Biomedical engineering; Image analysis;
   Image processing
- ST Infant behavior recognition systems; Pressure distribution image; Pressure sensors
- ET At
- L56 ANSWER 8 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN
- AN 2000:364944 HCAPLUS Full-text
- ED Entered STN: 01 Jun 2000
- TI Extracardiac versus cardiac haemocoelic pulsations in pupae of the mealworm (Tenebrio molitor L.)
- AU Slama, Karel
- CS Institute of Entomology, Czech Academy of Sciences, Prague, 16100/6, Czech Rep.
- SO Journal of Insect Physiology (2000), 46(6), 977-992 CODEN: JIPHAF; ISSN: 0022-1910
- PB Elsevier Science Ltd.
- DT Journal
- LA English
- Pulsations in mech. pressure of the pupal haemocoele were investigated by means of simultaneous recording from multiple sensors. It has been determined that cardiac and extracardiac haemocoelic pulsations are each regulated by substantially different and quite independent physiol. mechanisms. At the beginning and in the middle of the pupal interecdysial period the anterograde heartbeat and extracardiac pulsations occur in similar, but not identical periods. During the advanced pharate adult stage, there appear almost uninterrupted pulsations from different sources: cardiac, extracardiac, intestinal, and the ventral diaphragm. Extracardiac pulsations are associated with pressure peaks of 200-500 Pa, occurring at frequencies of 0.3-0.5 Hz. The effect of heartbeat on haemocoelic pressure is very small, 100- to 500-fold smaller, comprising only some 1 or 2 Pa during the vigorous anterograde systolic contractions. Accordingly, extracardiac pulsations are associated with relatively large abdominal movements from 30-90  $\mu$ m whereas heartbeat produces movements of only 100-500 nm. This shows that extracardiac pulsations can be easily confused with the anterograde heartbeat. It does not seem realistic to assume that the relatively weak insect heart, and not the 100- to 500-fold more powerful extracardiac system of abdominal pump, could be at all responsible for selective accumulation of haemolymph in anterior parts of the body, for inflation of wings or enhancement of tracheal ventilation. It has been established that thermog. from the pericardial region is not specific for the heartbeat. It records subepidermal movement of haemolymph resulting from the actions of both dorsal vessel and extracardiac pressure pulses as well. Shortly before adult eclosion the cardiac and extracardiac pulsations occasionally strike in concert, which profoundly increases the flow of haemolymph through pericardial and perineural sinuses. The relatively strong extracardiac pulsations cause passive movements of various visceral organs, tissue membranes, or tissue folds, giving thus a false impression of an authentic pulsation of tissues. In addition, extracardiac pulsations cause rhythmical movements of haemolymph between various organs, thus preventing haemolymph occlusion at the sites where the heart does not reach. It has been emphasized, finally, that the function of the autonomic nervous system (coelopulse), which integrates extracardiac pulsations, depends on homeostatic moderation of excessive or deficient conditions in insect respiration and haemolymph circulation.

RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD RE

- (1) Anderson, M; Cockroaches as models for neurobiology: application in biomedical research 1990, V1, P189
- (2) Babak, E; Winterstein Handbuch der Vergleichende Physiologie 1 1912, P265
- (3) Butz, A; Annals of Entomological Society of America 1962, V55, P480
- (4) Corbet, S; Pressure cycles and the water economy of insects 1988, VB318, P377
- (5) Farkas, R; Acta entomologica bohemoslovaca 1983, V80, P177
- (6) Farkas, R; Journal of Insect Physiology 1984, V30, P797 HCAPLUS
- (7) Hetz, S; Bioelectrochemistry and Bioenergetics 1993, V33, P165
- (8) Jones, J; The Physiology of Insecta 1964, P2

- (9) Jones, J; The circulatory system of insects 1977
- (10) Kestler, P; Environmental physiology and biochemistry of insects 1984, P137
- (11) Kuusik, A; European Journal of entomology 1994, V91, P297
- (12) McCann, F; Annual Review of Entomology 1970, V15, P173
- (13) Miller, P; The Physiology of Insecta 6 1974, P345
- (14) Miller, T; Comprehensive Insect Physiology, Biochemistry and Pharmacology 1985, V3, P289
- (15) Moreau, R; Journal of Insect Physiology 1974, V20, P1475 MEDLINE
- (16) Moreau, R; Journal of Insect Physiology 1975, V21, P1531
- (17) Pass, G; Microscopical Anatomy of Invertebrates 1998, V11B, P621
- (18) Provansal, A; Acta entomologica bohemoslovaca 1977, V74, P362
- (19) Provansal-Baudez, A; Acta entomologica bohemoslovaca 1985, V82, P161
- (20) Slama, K; Acta entomologica bohemoslovaca 1976, V73, P65
- (21) Slama, K; Annals of Entomological Society of America in press 1999, V92
- (22) Slama, K; Biological Bulletin 1988, V175, P289
- (23) Slama, K; Ecology of Aphidophaga 1986, P551
- (24) Slama, K; European Journal of Entomology 1993, V90, P23 HCAPLUS
- (25) Slama, K; Experientia 1986, V42, P54 HCAPLUS
- (26) Slama, K; Insect Biochemistry 1987, V17, P1103 HCAPLUS
- (27) Slama, K; Journal of Comparative Physiology B 1984, V154, P635
- (28) Slama, K; Journal of Insect Physiology 1979, V25, P825
- (29) Slama, K; Journal of Invertebrate Pathology 1981, V37, P11
- (30) Slama, K; Pesticide Biochemistry and Physiology 1987, V29, P25 HCAPLUS
- (31) Slama, K; Physiological Zoology 1994, V67, P163
- (32) Slama, K; Regulation of insect reproduction 1989, P23
- (33) Slama, K; Wild Silkmoths 1990, P107
- (34) Tartes, U; Physiology Entomology 1994, V19, P216
- (35) Vacha, M; Journal of Insect Physiology 1997, V43, P979 HCAPLUS
- (36) Wasserthal, L; Advances of Insect Physiology 1996, V26, P297
- (37) Wasserthal, L; Experientia 1976, V32, P577
- (38) Wasserthal, L; Journal of Comparative Physiology 1980, V139, P145
- (39) Wigglesworth, V; The principles of insect physiology sixth ed 1995
- (40) Zdarek, J; Journal of Experimental Zoology 1979, V207, P187
- L56 ANSWER 9 OF 15 COMPENDEX COPYRIGHT 2006 EEI on STN
- AN 1999(47):2624 COMPENDEX Full-text
- TI Body parts positions and posture estimation system based on pressure distribution image.
- AU Harada, Tatsuya (Univ of Tokyo, Tokyo, Jpn); Mori, Taketoshi; Nishida, Yoshifumi; Yoshimi, Tomohisa; Sato, Tomomasa
- MT Proceedings of the 1999 IEEE International Conference on Robotics and Automation, ICRA99.
- MO IEEE Robotics and Automation Society
- ML Detroit, MI, USA
- MD 10 May 1999-15 May 1999
- SO Proceedings IEEE International Conference on Robotics and Automation v 2 1999.p 968-975
  CODEN: PIIAET ISSN: 1050-4729
- PY 1999
- MN 55356
- DT Journal
- TC Application; Theoretical
- LA English
- AB A body parts positions and posture estimation system consisting of a pressure sensor distributed bed and body parts position and posture estimation software is realized. The pressure distribution measuring sensor board has 210 pressure sensors. Experimental results reveal that the system can not only estimate lying human's posture and display results intuitively but also estimate body parts positions precisely. 7 Refs.
- CC 731.3 Specific Variables Control; 732.2 Control Instrumentation; 723.2 Data Processing; 921.6 Numerical Methods; 723.5 Computer Applications
- CT \*Position control; Three dimensional computer graphics; Estimation; Computer software; Algorithms; Computer simulation; Pattern

matching; Contact sensors; Image analysis; Pressure
distribution

- ST Body parts position estimation system; Posture estimation system; Pressure image templates
- L56 ANSWER 10 OF 15 JICST-EPlus COPYRIGHT 2006 JST on STN
- AN 991030164 JICST-EPlus Full-text
- TI Functional Importance of Tactile Information in Hardness Perception.
- AU FUJITA KIN'YA
  - SASAKI HIROSHI; OYAMA YASUHIRO
- CS Tokyo Univ. of Agric. and Technol., Fac. of Technol. Iwate Univ., Grad. Sch.
- SO Hyumanv Intafesuv Shinpojiumu Ronbunshu (Human Interface), (1999) vol. 1999, pp. 601-606. Journal Code: Z0307B (Fig. 6, Ref. 10) ISSN: 1345-0794
- CY Japan
- DT Conference; Article
- LA Japanese
- STA New
- The congnitive rate of four levels of hardness was experimentally examined in ten AB normal volunteers with actual object as well as virtual object displayed by a gloveshaped force display, in order to discuss the role of visual, tactile and proprioceptive sensation in cognition of the hardness of an object. The cognitive rates of 1) actual object; 2) actual object without tactile information about the object deformation; 3) actual object without proprioceptive information; 4) virtual object using a force display and 5) virtual object with visual information, were 94, 82.8, 92.6, 83.6, 90.4%, respectively. The role of each sensation was estimated as follows, visual; 6.8%, tactile; 11% and proprioceptive; 1.4% from the differences of the cognitive rates. The functional importance of tactile information was clearly demonstrated. The analysis of the pinch motion was also conducted. The fingertip contact area was constant despite of the object hardness. It also suggested that the pinch motion is controlled based on the fingertip pressure distribution pattern that is sensed by the tactile receptors. Both experiments indicated the importance of tactile information in hardness perception via pinch motion. (author abst.)
- CC IB03000G; AE01000T; EL03020C (681.51:007.51; 159.938+159.929+159.9.01; 616-073:612-087)
- CT human factor; cognitive science; tactile sense; hardness; bioinstrumentation; visual sense; measurement system; finger (body region); recognition
- BT science; sense; measurement; measuring instrument; system;
   hand(body region); arm(forefoot); extremity; body
   region
- ST somasthesis; discrimination
- L56 ANSWER 11 OF 15 JICST-EPlus COPYRIGHT 2006 JST on STN
- AN 1000024148 JICST-EPlus Full-text
- TI New Tactile Display to Present Shear Deformation on Human Finger.
- AU ARAI FUMIHITO; MORITA HIDEYUKI FUKUDA TOSHIO
- CS Nagoya Univ., Grad. Sch.
  - Nagoyadai Sentangijutsukyodokense
- Nippon Bacharu Riariti Gakkai Taikai Ronbunshu (Proceedings of the Virtual Reality Society of Japan Annual Conference), (1999) vol. 4th, pp. 49-52. Journal Code: L3000A (Fig. 12, Ref. 6) ISSN: 1342-4564
- CY Japan
- DT Conference; Article
- LA Japanese
- STA New
- AB This paper proposes a tactile display for presenting shear deformation to the skin of the human finger. We fabricated the three dimensional moving stage that is driven by the hydraulic pressure. For presenting different deformation under the condition of same normal pressure, we use an air pad that can vacuum air. We performed experiments to present shear deformation using air vacuum. From this experiment, we can present large deformation under the condition of same normal pressure. (author abst.)
- CC IB03000G (681.51:007.51)
- CT finger(body region); tactile sense; clasping; skin(animal tissue);

force sense; virtual reality; pressure
distribution; display device

- BT hand(body region); arm(forefoot); extremity;
  body region; sense; holding; operation(processing); epithelial
   tissue; animal tissue; biomedical tissue; organization; computer
   graphics; image technology; technology; computer application;
   utilization; distribution; equipment
- ST display unit
- L56 ANSWER 12 OF 15 JICST-EPlus COPYRIGHT 2006 JST on STN
- AN 880582237 JICST-EPlus Full-text
- TI The dynamic behavior of clothing pressure on the **body** in slacks. (Part 1. Dynamic measurement of the distributions of the clothing pressures).
- AU SHIMIZU HIROKO; TOTSUKA UTAKO SHIMIZU YOSHIO
- CS Utsunomiya Univ., Faculty of Education Shinshu Univ., Faculty of Textile Science and Technology
- SO Sen'i Gakkaishi (Fiber), (1988) vol. 44, no. 10, pp. P.502-P.510. Journal Code: F0278A (Fig. 10, Tbl. 3, Ref. 34) CODEN: SENGA5; ISSN: 0037-9875
- CY Japan
- DT Journal; Article
- LA Japanese
- STA New
- We have developed a dynamic system which is designed to measure the clothing pressures AB distributed on the body. The dynamic system is to dynamically measure the clothing pressures on the body at multi-spotted sensors on a given part of the body. By using this system, we dynamically measured the distributions of the clothing pressures on the knee as well as on the hip during the period when the subject in basic slacks was performing some kinds of motions. The motions the subject was asked to repeat were: (1) bringing up and down a leg on a block, (2) stepping up and down on a block, (3) sitting on the chair and standing up, and (4) squatting and standing up. As a result of this experiment, we obtained following findings. (A) When the motion starts from a standing posture, the dynamic clothing pressures reach their peak before the motions finish. When the motion ends and the body comes to a still condition, the clothing pressures grow lower and indicate a constant value. But when the body starts moving again to return to the standing posture, the pressures once grow higher and go to zero value after reaching the peak. (B) The clothing pressures varied from motion to motion. The maximum values of the clothing pressures came out in the following order: (4) squatting and standing up, (3) sitting on the chair and standing up, (2) stepping up and down a block, (1) bringing up and down a leg on a block. (1) and (2) show almost the same values. The pressures on the knee show much greater than those on the hip. This can be because these pressures depend on the degree of skin stretching motion and of its curvature. (C) The pressures become greater when the hem of the slacks is taped around the ankle not prevent from shifting upward than in a natural condition. (abridged author
- CC YM02010H (677.014/.019)
- CT garment; wear test; motility; amenity; buttock; lumbar region; anthropometry; pressure measurement; continuous measurement; deformation; curvature; motion study; pressure distribution
- BT textile product; product; test; performance; property; body region; measurement; ratio; work analysis; analysis(separation); analysis; distribution
- L56 ANSWER 13 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN
- AN 1981:50541 HCAPLUS Full-text
- DN 94:50541
- ED Entered STN: 12 May 1984
- TI The Ronda peridotite: garnet-, spinel-, and plagioclase-lherzolite facies and the P-T trajectories of a high-temperature mantle intrusion
- AU Obata, M.
- CS Inst. Kristall. Petrogr., Eidg. Tech. Hochsch., Zurich, CH-8092, Switz.
- SO Journal of Petrology (1980), 21(3), 533-72

CODEN: JPTGAD; ISSN: 0022-3530 DT Journal LΑ English 53-3 (Mineralogical and Geological Chemistry) CC The Ronda high-temperature, alpine-type peridotite emplaced in the Betic Cordilleras, AB southern Spain, has been subdivided into four zones of mineral facies: (1) garnetlherzolite facies, (2) ariegite subfacies of spinel-lherzolite facies, (3) Seiland subfacies of spinel-lherzolite facies, and (4) plagioclase-lherzolite facies. This mineralogical zonation developed through a syntectonic recrystn. of a hot (1100 to 1200°), solid mantle peridotite during its ascent into the Earth's crust. Coexisting minerals from 12 peridotites, covering all the mineral facies, were analyzed by electron microprobe. Core compns. of pyroxene porphyroclasts indicate initial equilibration at 1100-1200° and at 20 to 25 kilobar. In contrast, the compns. of pyroxene neoblasts and spinel grains indicate that the recrystn. temperature throughout the mass was more or less constant at 800-900° but the pressure ranged from 5-7 kilobars in the plagioclase-lherzolite facies to 12-15 kilobars in the garnetlherzolite facies, i.e. variation in pressure was primarily responsible for the 4 facies types. This variation may be due to different parts of the peridotite body having followed different pressure-temperature paths; the peridotite underwent partial fusion during its ascent. A hypothetical, diapiric uprise that caused partial fusion and igneous differentiation of the mantle peridotite was a sep. event before the ascent that started from approx. 70 km depth in the upper mantle. Ests. of cooling rates and Al-diffusion rates in pyroxenes suggest that the rate of ascent was >1 m/yr. peridotite mineral assemblage Cordilleras Spain TT Peridotite RL: PRP (Properties) (mineral facies of, of Spain) ANSWER 14 OF 15 HCAPLUS COPYRIGHT 2006 ACS on STN 1978:126168 HCAPLUS Full-text DN 88:126168 Entered STN: 12 May 1984 ED N-Nitrosodiethanolamine in cosmetics, lotions and shampoos TΙ ΑU Fan, T. Y.; Goff, U.; Song, L.; Fine, D. H.; Arsenault, G. P.; Thermo Electron Res. Cent., Waltham, MA, USA CS Food and Cosmetics Toxicology (1977), 15(5), 423-30 SO CODEN: FCTXAV; ISSN: 0015-6264 DT · Journal English LA CC 62-1 (Essential Oils and Cosmetics) Section cross-reference(s): 4 N-nitrosodiethanolamine [1116-54-7] (NDEIA), a compound known to produce liver tumors AB in rats, was detected in consumer products such as cosmetics, hand and body lotions, and shampoos. The concentration varied from less than 1 ng/g (ppb) to 48,000 ng/g, the latter in a facial cosmetic. The source of the NDEIA was presumably the nitrosation of the di- and/or triethanolamine additives. NDEIA was identified by coincidence of retention time on 3 different high-pressure liquid chromatograph columns using an Nnitrosamine-specific detector. In a single case the compound eluting at the retention time of NDEIA was also isolated and identified by high-resolution mass spectrometry. nitrosodiethanolamine cosmetic lotion shampoo ST IT Cosmetics Lotions (nitrosodiethanolamine identification in, by liquid chromatog. and mass spectrometry) IT Health hazard (of nitrosodiethanolamine in cosmetics and shampoos) 1116-54-7 TT RL: PROC (Process) (in cosmetics, detection of) L56 ANSWER 15 OF 15 COMPENDEX COPYRIGHT 2006 EEI on STN DN 761064955 Full-text AN 1976(10):1150 COMPENDEX FUNDAMENTAL CHARACTERISTIC OF THE HUMAN BODY AND ΤI FOOT, THE FOOT-GROUND PRESSURE

PATTERN.

- AU Arcan, M. (Tel-Aviv Univ, Isr); Brull, M.A.
- SO J Biomech v 9 n 7 1976 p 453-457 CODEN: JBMCB5
- PY 1976
- LA English
- As new method and instrument developed by the authors allows a simultaneous recording of the pressure distribution between each foot and the ground during either standing or walking. The light reflected from a special sandwich plate produces an interference pattern which is a function of the contact pressure. The pressure distribution is displayed simultaneously on the whole contact surface as a diagram: the foot-ground pressure pattern (FGP). Quantitative data and new parameters representative of the mechanics of the foot for standing posture are proposed. These will provide a better description and understanding of the mechanics of the foot and the human body. The method may yield important data for the evaluation prosthetic-orthotic appliances, in post-operative follow-up of orthopedic patients, and in the mechanics of rehabilitation. 14 refs.
- CC 461 Biotechnology; 931 Applied Physics
- CT \*BIOMECHANICS:Research; BIOMEDICAL ENGINEERING:Living Systems Studies